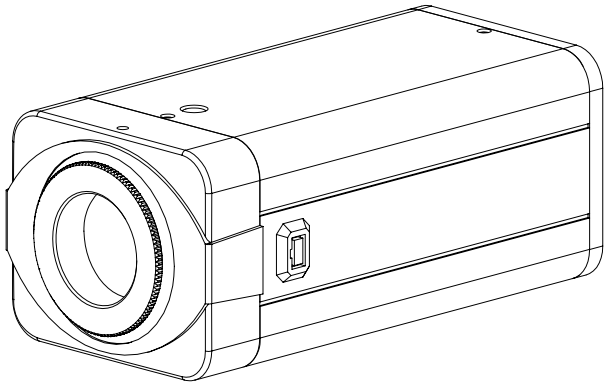
SERVICE MANUAL

1/3” SONY DSP COLOR CCD CAMERA

O.S.D. (ON SCREEN DISPLAY) SERIES



The serial number of this product may be found on the bottom of the unit.
You should note the serial number of this unit in the space provided and retain this instruction as a permanent record of your purchase to aid identification in the event of theft.

Model No. _____

Serial No. _____

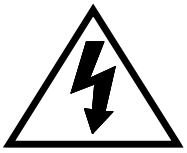
V.22_S_R

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK), NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is interned to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

▲ Before attempting to connect this product, please read and keep this manual for future use.

Safety Warning

1. Do not open the cover, it may cause electric shock.
   Ask a qualified service person for maintenance when you encounter any problems.
2. Installed the camera away from TV, radio transmitter, magnet, electric motor, transformer, audio speakers because the magnetic fields generate from above devices will distort the video image.
3. Place this camera on a solid base. Installed the camera away from stoves, or other heat generating devices as the high temperature could cause deformation, discoloration or other damages of the camera.

Install the camera at where the temperature range will stay between 0℃ to 50℃ (32℉ to 122℉)

4. Do not expose and operate the camera in the rain and humid areas.
5. Only use soft dry cloth to clean the camera. Also use lens tissue or cotton tipped applicator and ethanol to clean CCD sensor and camera lens.
6. When the camera is not in use, put the cover cap on the lens mount. Please do not touch the surface of CCD by bare hand.

Introduction

This Full Function series CCD cameras introduce a new level of high picture quality through the digital signal processing LSI's technology for advanced video surveillance. It provides most reliable and accurate color picture in security industries.

Main Features

- 540TV Lines Ultra High Resolution.
- High Sensitivity: SONY 1/3" Super HAD CCD image sensor.
- O.S.D. (On Screen Display): Controlled by selecting menu displayed on the monitor screen.
- D.N.R. (Digital Noise Reduction).
- Day & Night Mode: Automatically switch.
- Powerful Functions: DC/Video drive lens, B.L.C., Flickerless, White Balance control, Mirror, Motion Detection, Sens-Up, Sharpness, Privacy, Camera ID.
- Built-in anti-aliasing and IR-cut optical filter.

Installation Instructions

(1) Remove the cap from the lens mount.

(2) Select the C mount lens (with mount ring) or CS mount lens.

(3) Screw and fasten the lens into the lens mount.

(4) Connect the video output wire between monitor and camera through 75ohm type coaxial cable.

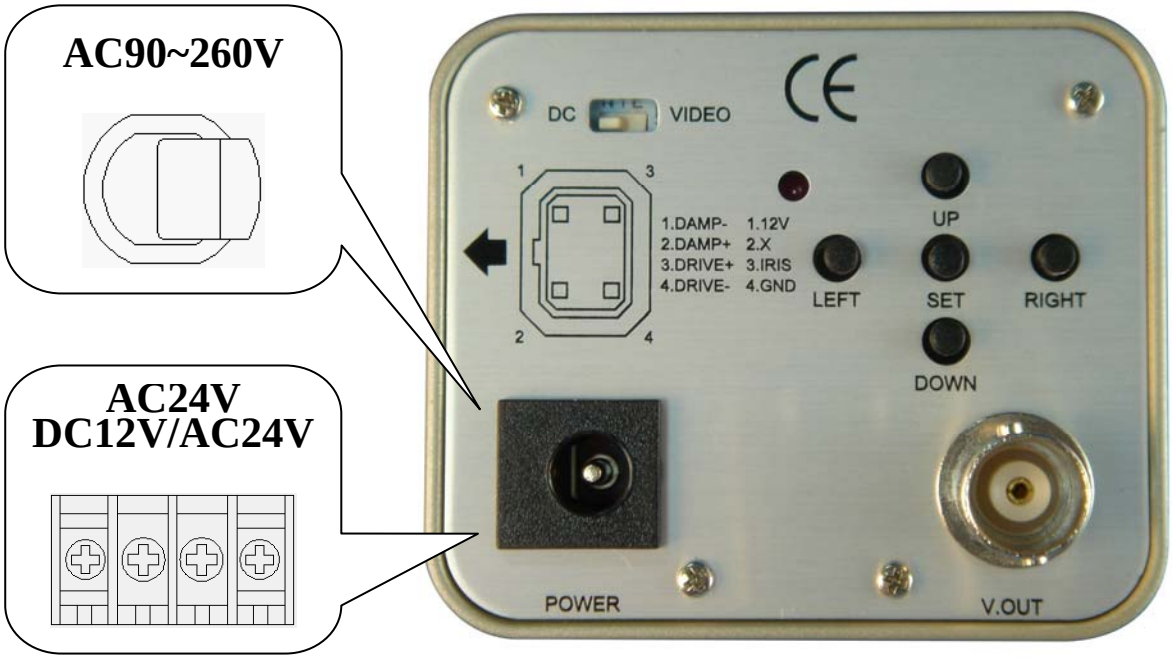
(5) Connect the power cord input.

(6) When monitor shows the picture, please adjust the focus and iris of the Lens to obtain the best image according to the following procedures:

- Choose the objects at a distance about 5 ~ 10 meter away.
- Loosen the mount lens fixing screw (use L wrench), if necessary.
- Turn the lens and the mount together until image is clear.
- Screw the mount to camera.

(7) Fix camera to the bracket, if necessary.

Rear Panel Switches **(DC12V, optional AC type)**

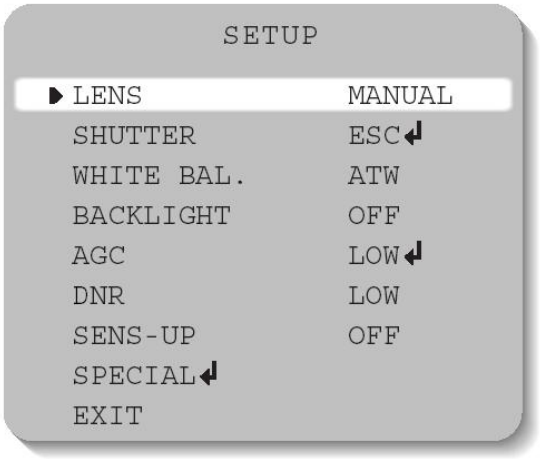


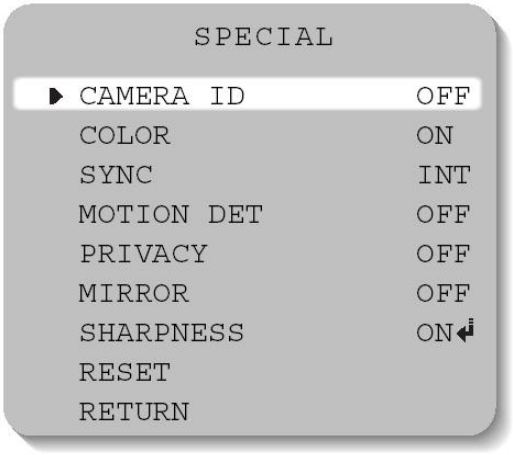
MENU

SET UP MENU

LENS	* Manual	* DC/VIDEO	
SHUTTER & SPEED	* ESC	* MANUAL	* FLK
WHITE BALANCE	* ATW	* AWC	* MANUAL
B.L.C. (BACK LIGHT COMPENSATION)	* OFF	* LOW	* MIDDLE
	* HIGH		
AGC (AUTO GAIN CONTROL)	* OFF	* LOW	* MIDDLE
	* HIGH		
D.N.R. (DIGITAL NOISE REDUCTION)	* OFF	* LOW	* MIDDLE
	* HIGH		
SENS-UP (LOW LUX)	* OFF	* AUTO	
SPECIAL	* CAMERA ID	* COLOR	
	* SYNC	* MOTION DETECTION	
	* PRIVACY	* MIRROR	
	* SHARPNESS	* RESET	
	* RETURN		
EXIT			

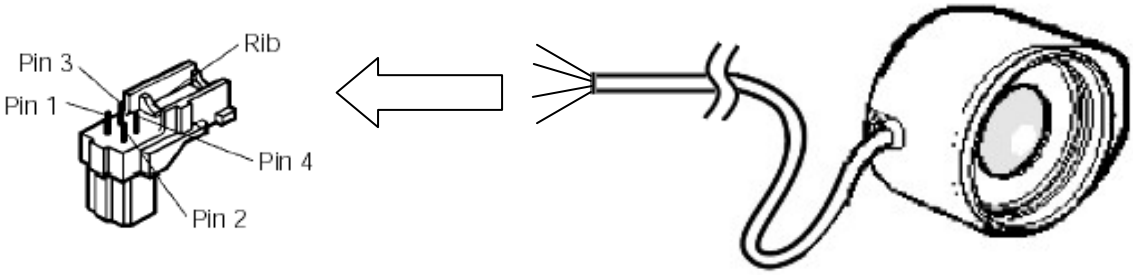
MENU On Screen





IRIS Level Control

	DC Drive	Video Drive
Pin 1	Drive -	Volt +
Pin 2	Drive +	N.C
Pin 3	Damp +	IRIS
Pin 4	Damp -	GND



SPECIFICATIONS

MODEL	**XC229S** (ULTRA H.R.)
PICK-UP DEVICE	Sony 1/3" IT Super HAD High Resolution CCD Image Sensor
SIGNAL PROCESSOR	Digital Signal Processor (D.S.P.)
SYNC. SYSTEM	Internal / Line Lock (L.L.)
RESOLUTION	540 TV Lines
MIN. ILLUMINATION	0.1Lux / F1.2, 0.001Lux (Sens-Up)
S/N RATIO	More Than 50 dB
POWER SUPPLY	DC12V; AC24V; AC90~260V; DC12V/AC24V Dual Power
GAMMA CORRECTION	0.45
CONTROL	OSD
WHITE BALANCE	ATW (1,800° K~10,500° K)
LENS MOUNT	C / CS Mount
AUTO IRIS CONTROL	Video Drive lens & DC Drive lens both supported
BASIC FUNCTION	Lens Selection (DC / VIDEO / Manual) Shutter Selection (ESC / Manual / FLK) ATW / AWC / Manual Selection BLC (Off / Low / Middle / High) Selection AGC (Off / Low / Middle / High) Selection DNR (Off / Low / Middle / High) Selection Sens-Up (Off / AUTO: 2X ~ 128X) Selection
ADDED FUNCTION	Camera ID ON / OFF Motion Detection ON / OFF (4 Zone, Position / Size / Sensitivity) Privacy Zone ON / OFF (4 Zone, Position / Size / Tone) Mirror ON / OFF Sharpness ON / OFF Reset Function DAY & NIGHT (Electronic Conversion) Watch Dog
VIDEO OUTPUT	1 Vp-p Composite Video / 75 ohm Load
POWER CONSUMPTION	3.5W (MAX.)
OPERATING TEMP.	-10°C to 50°C (14°F to 122°F)